
Sample Setup

In order to use Call Accounting for effective call data processing and reporting, a series of steps must be performed to initially set up its databases. Once this setup has been completed, you can run Call Accounting more efficiently and perform such tasks as collecting call records, calculating costs, and generating reports.

The following sample setup has been provided to assist you to initially set up your own Call Accounting databases and start a data collection. It contains the basic steps required to open a site, connect to the Meridian 1, collect and cost call records, enter a telephone configuration, and generate reports.

Note: This sample setup assumes that you have already installed Call Accounting onto a PC as part of Meridian Administration Tools. If you have not already done so, then install Call Accounting before proceeding.

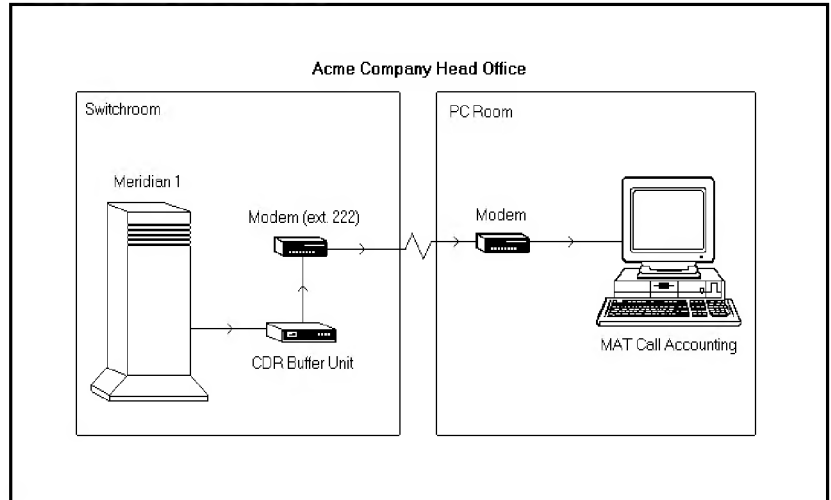
Scenario

This sample setup is based on the following scenario:

- The company Acme Company Ltd. is located in Dallas, Texas. The telephone number for the head office is **(214) 655-1111**. It has a branch office in Houston with the telephone number **(713) 455-1111**. The main node in Dallas is also connected to a Virtual Private Network (VPN).

- The name of this site is **ACMECO** and has already been created using the Site Configuration application of MAT Common Services.
- There are ten (10) trunks on the main location's Meridian 1. These are configured as follows:
 - **Route 0** has five (5) members (trunks) **1** to **5** for regular long distance service (DDD). These have access code **9**.
 - **Route 1** has two (2) members **1** and **2** for incoming calls using the company's 800 service and do not require access codes. These are output as trunks 1001 and 1002.
 - **Route 2** has two (2) members **1** and **2**. These trunks use a Tie Line service and have access code **8**. These are output as trunks 2001 and 2002.
 - **Route 3** has seven (7) members **1** to **7**. These are connected to a Virtual Private Network (VPN) with Location Codes **220**, **221**, and **222** and have access code **7**.
- The Meridian 1 is located in the switch room of the Acme Company head office. It requires a CDR buffer unit to be connected to it to collect CDR data. A modem is attached to this CDR buffer unit to allow for communications between it and a PC in another room. It has a dedicated extension number 222.
- The PC on which Call Accounting is installed is located in another room of the same building. A modem is attached to this PC's COM1 port and will be used to connect to the CDR buffer unit attached to the Meridian 1 and collect the CDR data from it.
- Acme wishes to report on toll calls only when generating reports. In addition, they wish to collect local calls which are to be summarized for each extension.

Figure 43
Sample Setup schematic



Before you define the telephone configuration for this scenario, you must have previously created a site using the Site Configuration application from MAT Common Services. When a site is created, a distinct set of site files will be created to store its data in the Customer Directory, Billing Database, Call Database, Communications Database, and the Telephone Configuration Database. Refer to the *MAT Common Services User guide* for complete details on how to enter site information.

Summary of Steps

The following list summarizes the steps which will be discussed in this chapter.

- 1** Install CDR buffer unit
 - a** Steps for CDR buffer unit connection
 - b** Notes for direct connection
- 2** Run Call Accounting
- 3** Open Site
- 4** Test Data Collection

- 5 Enter Telephone Configuration
 - a Create Location Book for VPN
 - b Enter Call Type Definitions
 - c Select Reporting Options
 - d Define Carrier Pricing Templates
 - e Enter Telephone Configuration
- 6 Test Telephone Configuration
 - a Print report
 - b Review Exception/Chronological Report
- 7 Follow-up procedures
 - a Update databases
 - b Set up operating schedule

Step 1: Install CDR buffer unit

This sample setup uses a CDR buffer unit to collect call records from the Meridian 1's CDR port. Therefore, the first step is to connect and install the CDR buffer unit onto the Meridian 1. It can then collect and store call records as they are output from the Meridian 1. You must then allow for the connection of the PC to the buffer unit to collect the call records from the buffer unit to the Call Accounting database files. In this example, you would configure and connect modems to the buffer unit and the PC.

Steps for CDR buffer unit connection

Perform the following steps to install and connect the CDR buffer unit to the Meridian 1.

- 1 Locate the CDR port on the Meridian 1 and ensure that the Meridian 1 is configured to output CDR records for collection purposes.
- 2 Plug in and turn on the CDR buffer unit as instructed in the user documentation provided with it.

- 3 Test the CDR buffer unit to ensure that it collects according to its instructions. Check its commands and displays to ensure that it responds.
- 4 Connect the PC on which Call Accounting is installed to the CDR buffer unit. You can connect the PC to the CDR buffer unit either directly (using an RS232 cable) or through a modem connection (using a null modem cable). This example requires a modem connection between the PC and the CDR buffer unit. Therefore, plug one modem into the CDR buffer unit with the null modem cable provided with the MDR-2000 and the other at the configured communications port (COM1) of the PC.

The operation of the CDR buffer units which are supported by Call Accounting may vary. You should therefore refer to the documentation provided with your CDR buffer unit for complete details on installing and connecting it.

Notes for direct connection

If your configuration requires that you collect call records directly from the Meridian 1 to the PC without a CDR buffer unit, then connect the PC to the Meridian 1 either through line drivers or using a direct connection (e.g., using an RS232 cable).

Step 2: Run Call Accounting

Once you have connected the CDR buffer unit to the Meridian 1 and the PC is properly connected to the CDR buffer unit, then you can run Call Accounting to test the data collection, enter your configuration information, and generate reports.

To access Call Accounting, you must first access and logon to the MAT system. To run MAT, double-click on the Meridian Administration Tools icon from the program group in which it was installed (e.g., StartUp). This will initiate the MAT system and display its Common Services icons. Click on the main Meridian Administration Tools icon to access the MAT Logon dialog. In this dialog, enter your User ID and Password. The MAT dialog will appear containing the installed MAT applications. To run Call Accounting, double-click on the Call Accounting icon.

Note: Call Accounting includes a software protection key that plugs into the parallel port of your PC. To run properly, Call Accounting must recognize that this protection key is attached. It ensures that only authorized copies of this software are being used at one time. Before you attempt to run Call Accounting, plug this key into a parallel port on your PC.

Step 3: Open Site

The next step is to open a site for this configuration using the Open Site command.

For complete details on the Call Accounting Site functions, refer to the chapter in this user guide entitled: *Site Management*.

Note: This site must already have been created using the Site Configuration application from MAT Common Services. Refer to the *MAT Common Services User guide* for more details on the Site Configuration application.

Perform the following steps to open the site ACMECO.

- 1 Click on **Open Site** from the File drop-down menu. The Open Site dialog will appear.
- 2 From the Open Site drop-down list box, click on **ACMECO** and click on the **OK** command button.

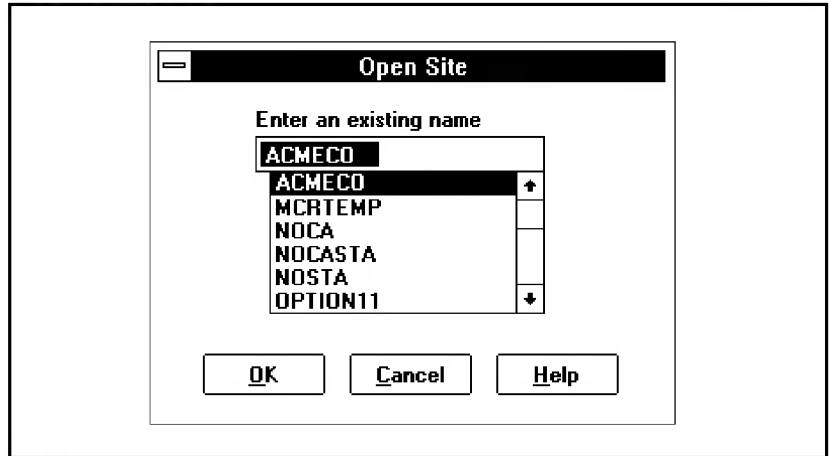
This will open the site ACMECO allowing you to access its databases and generate reports.

Step 4: Test data collection

Before you enter a configuration for this site, you should verify that the CDR buffer unit is collecting data from the Meridian 1 in the correct format. To do so, collect the call records from the CDR buffer unit and view them in the Call Database editor.

For complete details on the Communications Database and the Data Collection command, refer to the chapter in this guide entitled: *Communications Functions*.

Figure 44
Open Site dialog



To test this data collection, perform the following steps.

- 1 Wait for some calls to be recorded by the Meridian 1. Either wait for some calling activity on the switch or make a few telephone calls for this test. If the CDR buffer unit is properly connected to the Meridian 1, it will collect and store these call records as they are recorded by the Meridian 1.
- 2 Use the Communications Database to select the communications parameters for connecting to the CDR buffer unit. These parameters would have previously been defined in the Site Configuration application.
- 3 To select these parameters, select **Communications Database** from the Communications drop-down menu and select the SDI value corresponding to this configuration (e.g., click on SDI1 from the SDI option field).
- 4 Turn on the Collect and Index check boxes to have Call Accounting collect the call records from the CDR buffer unit to the Detail file (DETAIL1.DAT) and index them to the Call Database (MDR1.DAT) during the data collection process.
- 5 Start the data collection by selecting **Data Collection** from the Communications drop-down menu.

- 6 Once this data collection is complete, view the Call Database (MDR1.DAT) to verify that these call records are in the correct format. To view the Call Database, select **Call Database** from the Utilities cascading menu of the Database drop-down menu. The Call Database dialog will appear listing the call records which were just collected.
- 7 Review the call records for any invalid fields. For example, check the trunks, access codes, and digits dialed for invalid values. As well, check the call records' dates and times to ensure that they match the date and time of the Meridian 1.

Figure 45
Call Database window

	Orig. ID	Term. ID	Date (MM/DD)	Time (HH:MM)	Duration (HH:MM:SS)	Digits
1	D0007004	T0009002	06/01	09:21	00:00:42	4918005551234
2	T0007001	D0002229	06/01	09:43	00:10:04	
3	D0004000	T0008001	06/01	09:53	00:00:53	95551234
4	D0005871	T0008002	06/01	09:59	00:01:14	919055551111
5	T0007001	D0005809	06/01	10:05	00:02:59	
6	D0002229	T0008005	06/01	10:07	00:00:29	99055552222
7	D0002229	T0009001	06/01	10:23	00:00:18	495555555
8	D0002285	T0008001	06/01	10:24	00:00:11	918005551234
9	D0005005	T0008002	06/01	10:37	00:01:37	99055550000
10	D0004000	T0008003	06/01	10:42	00:00:51	95554321
11	D0002229	T0009002	06/01	12:12	00:00:27	48145556666
12	D0004001	T0008007	06/01	12:21	00:00:42	918007597243

Record : 5 Total : 254

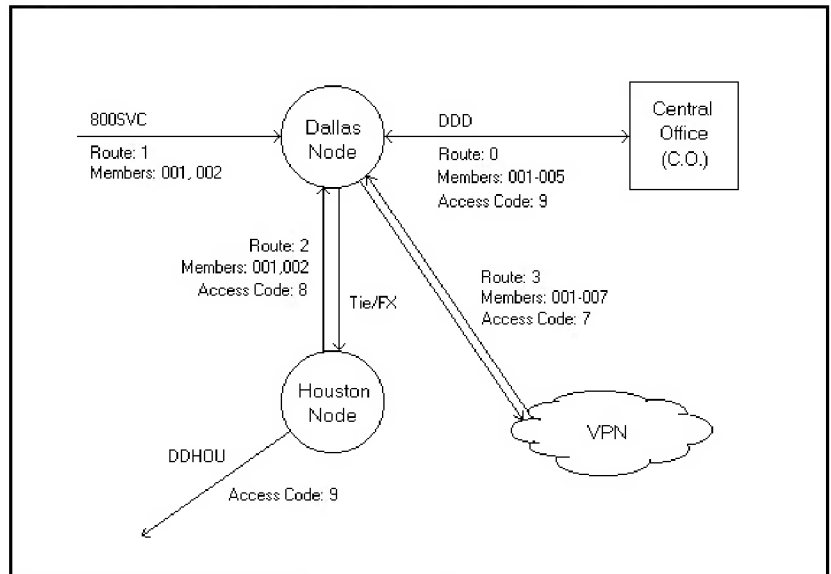
Once you have reviewed the call records and ensured that they are valid, then you can proceed to the next steps in this sample.

Step 5: Enter Telephone Configuration

The Telephone Configuration Database provides the main costing structure for the call records collected from the Meridian 1. It is a vital component of Call Accounting and is also the most complex database you will need to configure.

The following schematic outlines the trunk configuration for this setup.

Figure 46
Trunk Configuration schematic



There are several steps involved in entering a telephone configuration for this scenario. These are itemized into the following main steps:

- Create Location Book for VPN
- Enter Call Type Definitions
- Select Reporting Options
- Define Carrier Pricing Templates
- Enter Telephone Configuration

Create Location Book for VPN

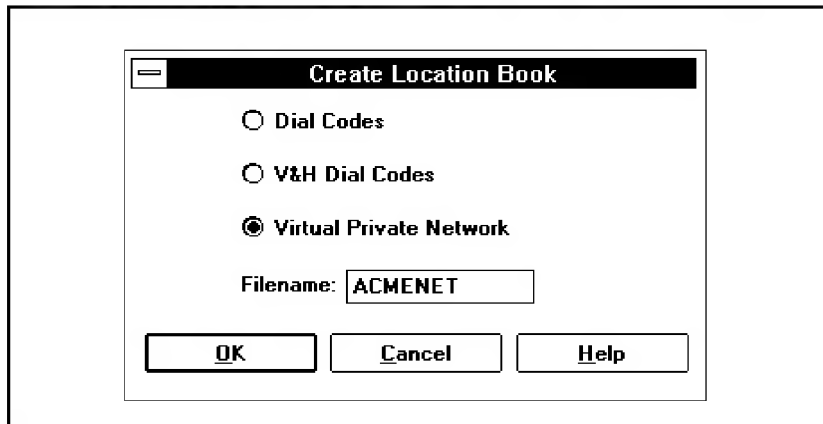
In this scenario, the main node is connected to a virtual private network (VPN) which is not associated with any predefined location books. You must therefore create a new location book to allow for costing in this VPN.

For complete details on Location Book functions and virtual private networks, refer to the chapter in this guide entitled: *Location Books & Rate Tables*.

To create a VPN table and add it to the Location Book Registry, perform the following steps.

- 1 Select **Location Books and Rate Tables** from the Database drop-down menu and click on **Location Book**. The Location Book Registry dialog will appear.
- 2 From the Location Book Registry dialog, add a new location book by clicking on the **Create Book** command button.
- 3 From the Create Location Book dialog which appears, click on the Virtual Private Network option button. In the Filename field, enter: **ACMENET** (the VPN filename without the LBK extension). Click on the **OK** command button to save this information.

Figure 47
Create Location Book dialog



- 4 The Virtual Private Network grid window will then appear allowing you to add the range of digits for the location codes **220** to **222**.

For the location code 220, click **Insert** from the Edit drop-down menu and enter the following information:

Low Range: **2200000**

High Range: **2209999**

Actual NPANXX: **214655**

Leave the Location field blank and click on the **OK** command button to add this VPN range of digits.

- 5 Repeat this step for the location code **221** by clicking on **Insert** from the Edit drop-down menu and entering the following information:

Low Range: **2210000**

High Range: **2219999**

Actual NPANXX: **214655**

Leave the Location field blank and click on the **OK** command button to add this VPN range of digits.

- 6 Repeat this step for the location code **222** by clicking on **Insert** from the Edit drop-down menu and entering the following information:

Low Range: **2220000**

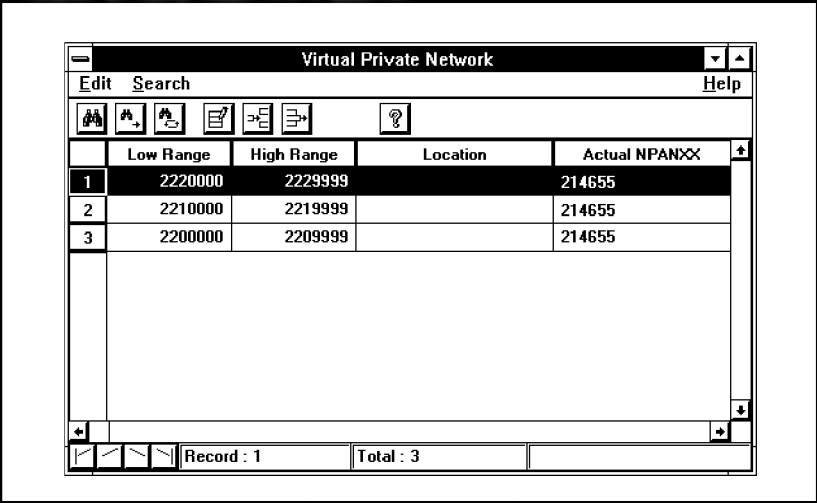
High Range: **2229999**

Actual NPANXX: **214655**

Click on the **OK** command button to add this VPN range of digits.

- 7 At a blank Virtual Private Network dialog, click on the **Cancel** command button to save this information and exit to the Virtual Private Network grid dialog. Notice that the grid will be updated with the digit range for this VPN. Click on **Close** from the Edit drop-down menu to exit to the Location Book Registry dialog.

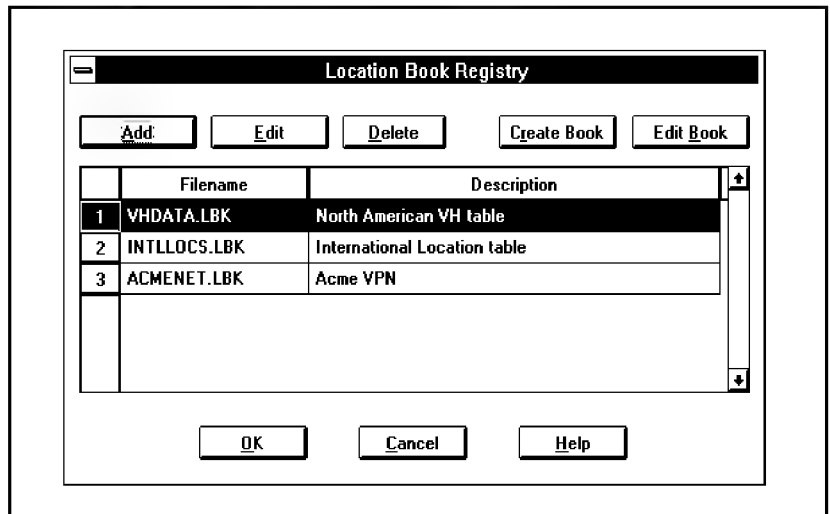
Figure 48
Virtual Private Network grid dialog



- 8 To add the location book ACMENET.LBK, click on the **Add** command button from the Location Book Registry dialog. The Location Book Selection dialog will appear.
- 9 From the Filename drop-down menu, select the filename which you entered in the Filename field in the previous step with the extension .LBK. For this example, enter: **ACMENET.LBK**.

- 10 In the Description field, enter: **Acme Virtual Network**. Click on the **OK** command button to select it. This location book will be added to the Location Book Registry grid. Click on the **OK** command button to save it and exit to the main window.

Figure 49
Location Book Registry dialog



This completes the steps for creating this VPN location book. Select this location book when you are defining the carrier pricing template for the VPN (later section).

Enter Call Type Definitions

The Call Type Definitions function contains a list of types of calls which will be used by the Telephone Configuration Database.

For complete details on the Call Type Definitions function, refer to the chapter in this guide entitled: *Database Maintenance*.

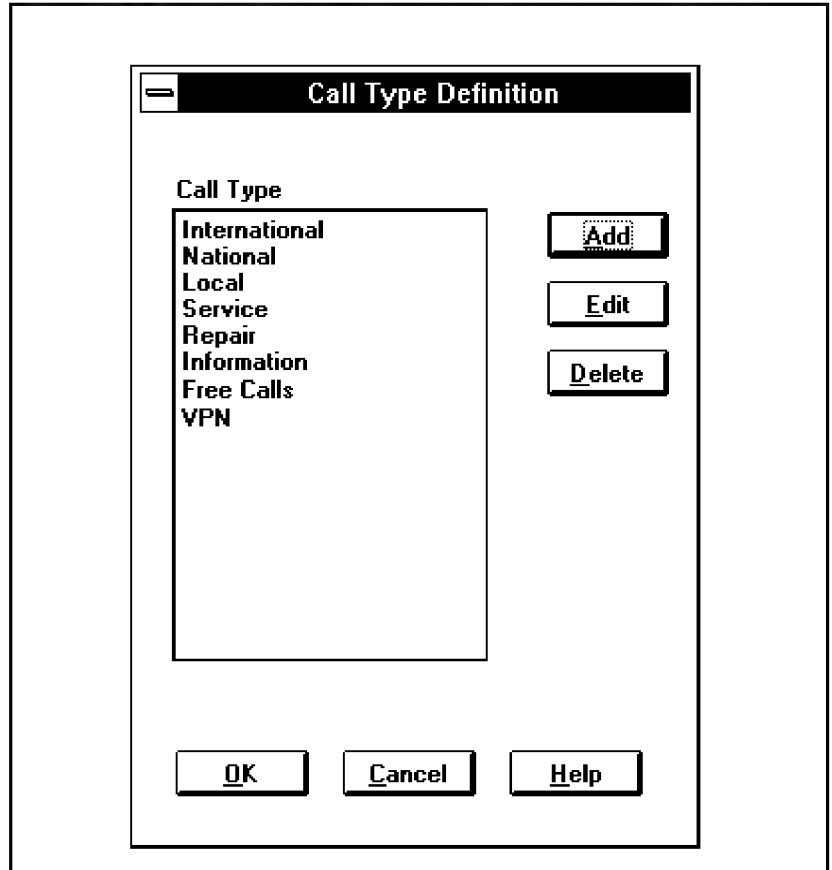
To enter the required call type definitions, perform the following steps.

- 1 From the Database drop-down menu, select **Location Books and Rate Tables** and select **Call Type Definition** from its cascading menu.
- 2 Add the following call types by clicking on the **Add** command button and entering the call type in the Call Type field:
 - International
 - National
 - Local
 - Service
 - Repair
 - Information
 - Free Calls
 - VPN

Click on the **OK** command button to add each new call type to the list.

- 3 Click on the **OK** command button from the Call Type Definition dialog to save these changes and exit to the main window.

Figure 50
Call Type Definitions dialog



Select Reporting Options

Before you enter your telephone configuration, you must first define the cost fields which will appear on your reports. These cost fields directly link the reported summary fields to the defined services in the telephone configuration.

For complete details on the Reporting Options, refer to the chapter in this guide entitled: *Database Maintenance*.

To enter the reporting options for this scenario, perform the following steps.

- 1** Select **Reporting Options** from the Database drop-down menu.
- 2** Enable the following options by turning on (X) their check boxes:
 - Include Account Calls
 - Export Other Billable Items
 - Include Auth. Code Calls
 - Banner Page on Reports
 - Tax Summary on Reports

Even though these do not apply to the telephone configuration, they provide the basic reporting features of your detail and summary reports.

- 3** To list the totals in the summary fields of the detail reports, enter the following information in the Cost Summary Fields:

Field 1: MDDD	Field 2: 800SV	Field 3: Network
Field 4: HDDD	Field 5: [blank]	Field 6: [blank]

- 4 Leave the Bottom Line Message on Reports fields set to the default values (e.g., **Reviewed By:** _____ **Approved By:** _____).

Figure 51
Reporting Options dialog

Reporting Options

☒ Include Account Calls ☒ Banner Page on Reports
☐ Replace Acct. Code by Name ☐ Use Acct. as Auth. Code
☐ Reports by Auth. Code ☒ Tax Summary on Reports
☒ Export Other Billable Items ☐ Update Data Before Reporting
☒ Include Auth. Code Calls ☐ Approximate Distance Calculation
☐ Replace Orig.ID with Inc.ID

Cost Summary Fields

Field 1: Field 2: Field 3:
 Field 4: Field 5: Field 6:

Bottom Line Message on Reports

Message 1:
 Message 2:
 Message 3:

- 5 Click on the **OK** command button to save this information for this site.

Define Carrier Pricing Templates

The Carrier Pricing Template files contain the criteria which determine the type and cost of a call. This information is based on the digits dialed. The Telephone Configuration Database uses these templates to provide costing for your various services.

For complete details on Carrier Pricing Templates, refer to the chapter in this guide entitled: *Location Books & Rate Tables*.

Each template can be defined from the Carrier Pricing Templates editor. For this example, you will need to define two templates: one using a regular DDD service with multiple pricing definitions and another using the location book defined for virtual private networks.

Carrier Pricing Template—Acme DDD Service

To enter the pricing definitions for the first Carrier Pricing Template, perform the following steps.

- 1 Click on **Location Books and Rate Tables** from the Database drop-down menu and click on **Carrier Pricing Templates** from its cascading menu.
- 2 Enter the pricing definitions by clicking on the **Add** command button. The Carrier Pricing Template Definition editor will appear.
- 3 In the Description field, enter: **Acme DDD Service**.

Figure 52
Carrier Pricing Template dialog

	Digits	Comments	Rate Filename	Rate Table interface
1	[011]*	International	NNNRATE	INT-1
2	{{1}}????	Long Distance Calls	XX1RATE	DDD
3	411	Directory Assistance		
4	611	Service		
5	[1]800*	Toll Free Calls		
6	{{1}}*	DDD	DDD	

Enter pricing definitions

The remaining steps will describe how to enter the pricing definitions for the Acme DDD Service. These will allow the templates to interpret calls which contain selected digit patterns and then cost them accordingly.

For this example, you will create pricing definitions for the following types of calls:

International Calls	Toll Free Calls
Directory Assistance Calls	Long Distance Calls
Service Calls	Local Calls

Note: The order in which these pricing definitions are entered is importation. For example, you will enter the local calls pricing definition last. This way, its digit pattern ('*') will only match the calls which have been first processed using the other pricing definitions. If the local calls pricing definition had been entered first, then its digit pattern would match all calls (without being processed by the other pricing definitions). Therefore, all calls would be priced as local calls.

- 1 For International Calls, click on the **Add** command button from the template dialog and enter the following information:

Digit Patterns: **[011]***

Comments: **International**

Location Book: **International Location Codes** (International location table)

Rate Filename: **NNNRATE** (where NNN represents the carrier for these calls)

Rate Table Interface: **INT-1**

Call Type: **International**

Initial: **60**

Additional: **60**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

Figure 53
Pricing Definition dialog

The screenshot shows the 'Pricing Definition' dialog box with the following fields and values:

- Digit Patterns: 011
- Comments: International
- Location Book: International Location Codes
- Rate Filename: NNRATE (with an 'Edit' button)
- Rate Table Interface: INT-1
- VDP Interface: (empty)
- Rate Table Comments: International Rates (30.6)
- VDP Comments: Rate Discount Service
- Cost per Minute: 0.00
- Call Type: International
- Cost per Pulse: 0.00
- Cost per Call: 0.00
- Duration Rounding (Seconds):
 - Initial: 60
 - Additional: 60

Buttons at the bottom: OK, Cancel, Help.

- 2 For Directory Assistance Calls, click on the **Add** command button and enter the following information:
- Digit Patterns: **411**
- Comments: **Directory Assistance**
- Location Book: **North American VH Table**
- Cost per Call: **0.60**
- Call Type: **Information**
- Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 3 For Service Calls, click on the **Add** command button and enter the following information:

Digit Patterns: **611**

Comments: **Service**

Location Book: **North American VH Table**

Call Type: **Service**

Initial: **60**

Additional: **60**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 4 For Toll Free Calls, click on the **Add** command button and enter the following information:

Digit Patterns: **1800***

Comments: **Toll Free Calls**

Location Book: **North American VH Table**

Call Type: **Toll Free**

Initial: **60**

Additional: **60**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 5 For Long Distance Calls, click on the **Add** command button and enter the following information:

Digit Patterns: **[1]***

Comments: **DDD**

Location Book: **North American VH Table**

Rate Filename: **NNRATE**

Rate Table Interface: **DDD**

Call Type: **National**

Initial: **60**

Additional: **60**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 6 For Local Calls, click on the **Add** command button and enter the following information:

Digit Patterns: *****

Comments: **Local Calls**

Location Book: **North American VH Table**

Call Type: **Local**

Initial: **60**

Additional: **60**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 7 Click on the **OK** command button from this dialog to save this information and exit to the Carrier Pricing Templates grid.

This completes the entries for this template's pricing definitions. The next step is to enter the definitions for the virtual private network.

Carrier Pricing Template—Acme VPN

To enter the pricing definitions for this Carrier Pricing Template, perform the following steps.

- 1 From the Carrier Pricing Templates grid, click on the **Add** command button. The Carrier Pricing Template Definition editor will appear.
- 2 In the Description field, enter: **Acme VPN**

Enter pricing definitions

The remaining steps will describe how to enter the pricing definitions for the Acme VPN template. These will allow the templates to interpret calls which contain selected digit patterns and then cost them accordingly.

For this example, you will create pricing definitions for the following types of calls:

- VPN Calls
- Other Calls

Note: The order in which these pricing definitions are entered is importation. For example, you will enter the Other Calls pricing definition last. This way, its digit pattern ('*') will only match the calls which have been first processed using the VPN pricing definition. If the Other Calls pricing definition had been entered first, then its digit pattern would match all calls (without being processed by the VPN pricing definition).

- 1 For VPN Calls, click on the **Add** command button from the template dialog and enter the following information. Assume a cost per minute of \$0.08.

Digit Patterns: **???-????**

Comments: **VPN Calls**

Location Book: **Acme VPN**

Cost per Minute: **0.08**

Call Type: **VPN**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 2 For Other Calls, click on the **Add** command button and enter the following information:

Digit Patterns: *

Comments: **Other Calls**

Location Book: **North American VH Table**

Call Type: **VPN**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

- 3 From the Carrier Pricing Template dialog, click on the **OK** command button to save this template and return to the main window.

This completes the entries for these templates' pricing definitions. The next step is to enter the telephone configuration for this scenario.

Enter Telephone Configuration

The Telephone Configuration Database is the key to pricing calls and tracing them to their destinations. It defines the type of costing used by each trunk route/member (e.g., DDD, Tie Line) and includes any additional costs defined by your system. Each defined service uses predefined location books and rate tables based on the data supplied by your telecommunications carrier.

For complete details on the Telephone Configuration Database, refer to the chapter in this guide entitled: *Database Maintenance*.

To access the Telephone Configuration Database, click on **Telephone Configuration** from the Database drop-down menu.

Define Internal Calls

If your system applies costs to internal calls (i.e., calls made between extensions within the Meridian 1), then you must enter these costs in the Internal Calls Costing section of the Telephone Configuration Database. This scenario does not require internal call costing.

Add main node - Dallas

The first step in entering this telephone configuration is to define the main node. From the Telephone Configuration grid, click on the **Add** command button and enter the following general information.

- 1** In the Company Name field, enter: **Acme Company Ltd.**
- 2** In the Company Location field, enter: **Dallas, Texas**
- 3** Turn on (X) the Main Node check box.
- 4** From the Location Book Name drop-down list box, select: **North American VH Table**
- 5** In the Dial Code/NPANXX field, enter: **214655**
- 6** Click on the **OK** command button to save this information and exit to the Telephone Configuration dialog.

Note: Frequently, the **OK** command button will appear at the bottom of a data entry grid when you initially add data. As well, you may encounter the **Close** command button in the same grid when editing data. You can use both the **OK** and **Close** command buttons to enter the added or updated data and exit from the data entry grid.

Figure 54
Main Node definition

Node Information

General Information

Company Name:

Acme Company Ltd.

Company Location:

Dallas, TX

☒ Main Node

+/- Time Zone:

Currency Exchange:

Taxes

Location Book

Location Book Name

North American VH Table

Dial Code/NPANXX

214655

Defined Services

Edit

Add

Delete

Trunk Group/Service ID	Description

Close

Help

Before you define the actual services for this main node (in the Defined Services grid of this dialog), you must first define any other nodes which will connect to it (i.e., Houston node).

Add second node - Houston

This scenario requires that a second node in Houston be connected to the main node in Dallas. To add this second node to the telephone configuration, click on the **Add** command button from the Telephone Configuration grid as you did in the previous step.

From the Node Information dialog, enter the following information:

- 1 In the Company Name field, enter: **Acme Company Ltd.**
- 2 In the Company Location field, enter: **Houston, Texas**
- 3 Since you have already defined the previous record in this grid as the main node, leave the Main Node check box blank.
- 4 There is no time zone difference for this node. Therefore, in the +/- Time Zone field, enter: **0**
- 5 Similarly, there is no currency exchange for this node. Therefore, in the Currency Exchange field, enter: **1**
- 6 From the Location Book drop-down list box, select: **North American VH Table**
- 7 In the Dial Code/NPANXX field, enter: **713455**
- 8 Click on the **OK** command button to save this information and exit to the Telephone Configuration dialog.

This completes the entries for the general information of this node. Before you attempt to enter its service definition, you should return to the main node's record and enter its service definition. This will allow for the second node's Tie Line services to be assigned to the main node first.

Add DDD service definition to main node

Add the first service definition to the main node by performing the following steps.

- 1 From the Telephone Configuration grid, edit the Main Node record by highlighting its record line in the grid and by clicking on the **Edit** command button.

- 2 In the Defined Services grid, click on the **Add** command button to add the main node's service definition information. The Trunk Group Service Definition dialog will appear.

Figure 55
Trunk Group Service Definition dialog

Trunk Group Service Definition - ACME Company

Trunk Group Information

Trunk Group/Service ID
DDD Edit Trunks Call Digit Translation

Description
Acme Carrier Service Fixed Costs

Costing and Reporting Options

Outgoing Calls Incoming Calls Call Reporting Options

OK Cancel Help

- 3 In the Trunk Group/Service ID field, enter: **DDD**

- 4 Click on the Edit Trunks command button and then the **Add** command button and enter the following information:

Low Range: **1**

High Range: **5**

Line/Description: **DDD Trunks**

This will add the route 0 members 001 to 005 to this node.

Trunk range data is entered as the route number immediately followed by the three digit member number. For the low range trunk entry, this would be '0' + '001' (or '0001'). Since leading zeros can be ignored, simply enter '1'.

Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Trunk Numbers grid. Click on the **Close** command button to exit to the Trunk Group Service Definition dialog.

- 5 In the Description field, enter: **Acme Carrier Service**
- 6 Define the costing for outgoing calls by clicking on the **Outgoing Calls** command button.
- 7 Enter the connect time adjustment (the call's connection time to the trunk) by clicking on the **Add** command button from the Connect Time Adjustment grid.
- 8 In the Digits field, enter: **011***. The system will interpret all calls starting with the digits 011 (International Calls) and apply the appropriate connect time adjustments.
- 9 In the Comments field, enter: **International Calls**
- 10 In the Minimum Call Duration field, enter: **10**. This is the minimum amount of time (in seconds) which the call must register for it to be costed.
- 11 In the Connect Time field, enter: **5**. This is the time (in seconds) which the system allows for a connection.
- 12 Click on the **OK** command button to add this record to the grid.

Figure 56
Outgoing Calls Costing dialog

Outgoing Calls Costing - ACME Company

Connect Time Adjustment

Add Insert Edit Delete

	Digits	Comments	Minimum Call Duration	Connect Time
1	011*	International Calls	10	5

Access Code Carrier Costing

Add Insert Edit Delete

	Access Code	Carrier Pricing Template	Cost Adjustment (%)
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Close Help

- 13** Repeat steps 7-12 for digit patterns '1*' (long distance calls) and '*' (other calls). Ensure that the pattern '*' is the last entry in the grid. Click on the **Cancel** command button to exit to the Outgoing Calls Costing dialog.

Note: If these trunks have answer supervision, then you do not need to enter a connect time adjustment value. You can therefore ignore steps 7-12.

- 14** Enter the access code carrier costing information by clicking on the **Add** command button from the Access Code Carrier Costing grid. Enter the following information:

Access Code: **9**

Connection Type option button: **Direct**

Carrier Pricing Template: **Acme DDD Service**

Leave the remaining fields blank (they are not required for this example) and click on the **OK** command button.

Click on the **Close** command button to save this information. Click on the **Close** command button again to exit to the Trunk Group Service Definition dialog.

- 15** Enter the call reporting options for this trunk service by clicking on the Call Reporting Options command button. To add a record, click on the **Add** command button and enter the following information:

Call Type: **All Calls**

Print Option: **Detail**

Cost Field: **DDD**

Route DES: **DDD**

Digits Mask: **0**

- 16** Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Call Reporting Options grid. The grid will automatically be updated with this information. Click on the **Close** command button to exit to the Trunk Group Service Definition dialog.

This completes the first defined service (DDD) for the main node. Click on the **OK** command button from the Trunk Group Service Definition dialog to save this information and exit to the Node Information dialog.

Add 800 service definition to main node

The main node contains a trunk group with an 800 service. Add this service definition to the main node by performing the following steps.

- 1** Click on the **Add** command button to add another service definition record to the Service Definition grid.
- 2** In the Trunk Group/Service ID field, enter: **800SV**
- 3** Click on the **Edit Trunks** command button to define the range of trunks which use this node's services. Click on the **Add** command button and enter the following information:

Low Range: **1001**

High Range: **1002**

Line/Description: **800 Incoming Trunks**

This will add the route 1 members 001 to 002 to this node. Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Trunk Numbers grid. Click on the **Close** command button to exit to the Trunk Group Service Definition dialog.

- 4** In the Description field, enter: **800 Incoming Service**
- 5** To define the incoming calls for this service, click on the **Incoming Calls** command button and enter the following information:

Connection Type option button: **Direct**

Carrier Pricing Template: **Acme DDD Service**

Click on the **Close** command button to save this information and exit to the Trunk Group Service Definition dialog again.

- 6 Enter the call reporting options for this service by clicking on the **Call Reporting Options** command button. From the Call Reporting Options grid which appears, click on the **Add** command button.

Enter the following information in this dialog:

Call Type: **All Calls**

Print Option: **Detail**

Cost Field: **800SV**

Route DES: **800**

Digits Mask: **0**

- 7 Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Call Reporting Options grid. The grid will automatically be updated with this information. Click on the **Close** command button.

This completes the updates for this service. Click on the **OK** command button from the Trunk Group Service Definition dialog to save this information and exit to the Node Information dialog.

Add Tie Line service definition to main node

The next step is to add the definition for a Tie Line service to the main node. To cost a Tie Line service, perform the following steps.

- 1 Click on the **Add** command button from the Defined Services grid of the Node Information dialog. This will access the Trunk Group Service Definition dialog.
- 2 In the Trunk Group/Service ID field, enter: **Tie**

- 3 Click on the **Edit Trunks** command button to define the range of trunks which use this node's services. Click on the **Add** command button and enter the following information:

Low Range: **2001**

High Range: **2002**

Line/Description: **Tie Trunks**

This will add the route 2 members 001 to 002 to this node. Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Trunk Numbers grid. Click on the **Close** command button to exit to the Trunk Group Service Definition dialog.

- 4 In the Description field, enter: **Tie Trunks to Houston**
- 5 Enter the fixed costs for this Tie Line service by clicking on the **Fixed Costs** command button. These costs will apply to all calls. In the All Calls Cost per Month field, enter: **200.00**
- 6 Click on the **Close** command button to save this information and exit to the Trunk Group Service Definition dialog.
- 7 Define the costing for any outgoing calls from this trunk group by clicking on the **Outgoing Calls** command button.
- 8 Click on the **Add** command button from the Access Code Carrier Costing grid and enter the following information:

Access Code: **8**

Connection Type option button: **Tie/FX Line**

Tie Node Location: **Acme Company Ltd. - Houston, Texas**

Click on the **OK** command button from this dialog to save this information and return to the Outgoing Calls Costing dialog.

- 9 Since this service does not require any connect time adjustments, leave its grid blank.
- 10 Click on the **Close** command button from this dialog to return to the Trunk Group Service Definition dialog again.
- 11 Define the costing for any incoming calls for this trunk group by clicking on the **Incoming Calls** command button.

- 12** Enter the following information:

Connection Type option button: **Tie/FX Line**

Tie Node Location: **Acme Company Ltd. - Houston, Texas**

Leave the remaining fields blank and click on the **Close** command.

- 13** Enter the call reporting options for this trunk group by clicking on the **Call Reporting Options** command button. In the Call Reporting Options grid which appears, click on the **Add** command button and enter the following information:

Call Type: **All Calls**

Print Option: **Detail**

Cost Field: **NETWORK**

Route DES: **TIE**

Digits Mask: **0**

- 14** Once you have entered this information, click on the **OK** command button to save it and return to the Call Reporting Options grid. Click on the **Close** command button.

Add VPN service definition to main node

The next step is to add the definition for a VPN service to the main node. To enter this service, perform the following steps.

- 1** Click on the **Add** command button from the Defined Services grid of the Node Information dialog. This will access the Trunk Group Service Definition dialog.
- 2** In the Trunk Group/Service ID field, enter: **VPN**

- 3 Click on the **Edit Trunks** command button to define the range of trunks which use this node's services. Click on the **Add** command button and enter the following information:

Low Range: **3001**

High Range: **3007**

Line/Description: **VPN Trunks**

This will add the route 3 members 001 to 007 to this node. Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Trunk Numbers grid. Click on the **Close** command button to exit to the Trunk Group Service Definition dialog.

- 4 In the Description field, enter: **VPN Trunks**
- 5 Define the costing for any outgoing calls from this trunk group by clicking on the **Outgoing Calls** command button.
- 6 Click on the **Add** command button from the Access Code Carrier Costing grid and enter the following information:

Access Code: **7**

Connection Type option button: **Direct**

Carrier Pricing Template: **Acme VPN**

Click on the **OK** command button from this dialog to save this information and return to the Outgoing Calls Costing dialog.
- 7 Since this service does not require any connect time adjustments, leave its grid blank.
- 8 Click on the **Close** command button from this dialog to return to the Trunk Group Service Definition dialog again.

- 9 Enter the call reporting options for this trunk group by clicking on the **Call Reporting Options** command button. In the Call Reporting Options grid which appears, click on the **Add** command button and enter the following information:

Call Type: **All Calls**

Print Option: **Detail**

Cost Field: **NETWORK**

Route DES: **VPN**

Digits Mask: **0**

- 10 Once you have entered this information, click on the **OK** command button to save it and return to the Call Reporting Options grid. Click on the **Close** command button.

This completes the entries for the service definitions of the main node. Click on the **OK** command button to save this trunk group information and exit to the Node Information dialog. Click on the **Close** command button to save the node information and exit to the Telephone Configuration dialog.

Add DDD service definition to Houston

The next step in setting up the telephone configuration is to define the services for the second site (Houston). To enter this information, double-click on the record line for the Houston node in the Telephone Configuration grid (already created in a previous step).

Click on the **Add** command button in the Defined Services grid and perform the following steps.

- 1 In the Trunk Group/Service ID field, enter: **DDHOU**
- 2 In the Description field, enter: **DDD Service for Houston Node**
- 3 Do not enter any fixed costs for this service.
- 4 Enter the details for any outgoing calls from this node by clicking on the **Outgoing Calls** command button.

- 5 Define the connection time adjustments for this node by clicking on the **Add** command button from the Connect Time Adjustment grid and entering the following information:

Digits: **011***

Comments: **International Calls**

Minimum Call Duration: **10**

Connect Time: **5**

Click on the **OK** command button to save this information. Repeat this step for digit patterns '1*' (long distance calls) and '*' (other calls). Ensure that the pattern '*' is the last entry in the grid. Click on the **Cancel** command button to exit to the Outgoing Calls dialog.

- 6 Enter the access code carrier costing information by clicking on the **Add** command button in the Access Code Carrier Costing grid and entering the following information:

Access Code: **9**

Connection Type option button: **Direct**

Carrier Pricing Template: **Acme DDD Service**

Click on the **OK** command button to save this information.

- 7 Click on the **Close** command button to save this information and exit to the Trunk Group Service Definition dialog.

- 8 Define the call reporting options for this trunk group by clicking on the **Call Reporting Options** command button from the Trunk Group Service Definition dialog.

- 9 In the Call Reporting Options grid dialog which appears, click on the **Add** command button. Enter the following information:

Call Type: **All Calls**

Print Option: **Detail**

Cost Field: **HDDD**

Route DES: **HDD**

Digits Mask: **0**

- 10 Click on the **OK** command button to save this information and click on the **Cancel** command button to exit to the Call Reporting Options dialog. Click on the **Close** command button to save this information and exit to the Trunk Group Service Definition dialog. Click on the **OK** command button to exit to the Node Information dialog.
- 11 From the Node Information dialog, click on the **Close** command button.
- 12 From the Telephone Configuration dialog, click on the **OK** command button to save this node information and exit to the main window.

This completes the steps to entering a telephone configuration for this sample setup.

Step 6: Test Telephone Configuration

Once you have entered the telephone configuration, you should test it by generating a costing report such as the Exception/Chronological Report. This report contains calls placed in the order in which they are found in the Call Database.

This report displays important details about the collected and costed call records including: whether the digits were formatted properly; whether the location name and the route used are accurate; and if it was costed properly. This way, you can verify that the Telephone Configuration you just created will accurately process all future call records collected from the Meridian 1.

Print report

Perform the following steps to print the Exception/Chronological Report to the printer.

- 1 Select the printer as the output device by clicking on **Select Output Device** from the File drop-down menu and clicking on the **Printer** option. Click on the **OK** command button to select this output device. If you have not installed and configured a printer for Windows, then you should do so according to the documentation provided with your printer.
- 2 Print the Exception/Chronological Report to the printer by clicking on **Cost Allocation** from the Reports drop-down menu and clicking on **Exception/Chronological Report**. The Exception/Chronological Report dialog will appear containing the check box **Recalculate line usage for report**. Turn this check box on (X) to recalculate the line usage and click on the **OK** command button to print the report to the output device.

Review Exception/Chronological Report

Once you have printed the report, review it to see if the collected call records were processed as you expected. In particular, check the following fields.

Digits Dialed: Check the digits dialed field of each call record to verify that they represent the digits which were actually dialed. If they are incorrect, then you may need to adjust them using the Call Digit Translation function.

Location Name: Review the Location field of each call record to ensure that it is valid as it is entered in the Location Books and Rate Tables record for this configuration. If the location name is incorrect, then you may have selected a wrong Carrier Pricing Template for this configuration.

Route Used: This field in the record displays the type of route which this trunk group uses for costing (e.g., **DDD** as entered in Cost Field 3 of the Reporting Options function). If the call record uses a certain trunk group and you entered a different trunk group in the Telephone Configuration, then this field in the report may be incorrect.

Cost: This field in the record displays any costs associated with this call such as long distance charges or any fixed costs assigned to each call. If, for example, this is an outgoing call made to a location which incurs long distance charges, then this field will display that charge. Check this cost against the telephone bill from your long distance service provider. This will ensure that the trunk groups selected for this configuration accurately represent your telephone system.

If report reflects errors

If this report does not accurately represent the call record and is inconsistent with your actual telephone usage, then your configuration may be incorrect. Access the Telephone Configuration function again and enter the correct information. The following is an example error situation.

The Route Used fields in the Exception/Chronological Report contain the cost field name **TIEFX** only for selected call records. This is due to the fact that you entered trunks ranging from **2000** to **2001** for the Tie/FX service instead of trunks **2001** to **2002**. Only the Tie/FX calls which were made on trunk 2001 were recorded and displayed on this report; not for trunk 2002.

To correct this error, return to the Telephone Configuration function and from the Defined Services function, change the trunk range to **2001** to **2002**. This was entered in the step under *Enter Telephone Configuration*, entitled: *Add Tie Line service definition to main node*.

If report is correct

If this report indicates that these call records were processed and costed correctly, then this setup is complete.

Step 7: Follow-up procedures

Now that you have set up Call Accounting to collect and process the call records from the Meridian 1, you can update the other supporting databases to enhance the information provided in your reports. As well, you should set up a schedule of procedures to simplify these procedures.

Update databases

The first databases which should be updated are the Billing Database and Customer Directory. Although these databases are not essential to processing the call records for reports, they will provide valuable information for them. Call Accounting uses the data entered in the Billing Database to accumulate and assign costs by extension, department, or division. The Customer Directory identifies commonly called telephone numbers on the billing reports.

Set up operating schedule

Once you have set up Call Accounting, you should define and follow a schedule which will allow you to easily manage the process of collecting call records, generating reports, and updating the databases. This will facilitate the procedures involved in using Call Accounting.

Refer to the section in this user guide entitled *Operating Procedures* for a recommended schedule of activities. This will assist you in setting up your own operating procedures.

This completes the steps required for this sample setup. Review these procedures to familiarize yourself with the main functions required to start using Call Accounting.